

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/004007

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 A61M15/00

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 A61M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EP0-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

| Category * | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No. |
|------------|---|-----------------------|
| X          | US 5 562 918 A (STIMPSON PHILIP G)<br>8 October 1996 (1996-10-08)<br>column 7, line 8 - column 13, line 66;<br>figures 1-4, 20, 26  | 1-9, 20,<br>22, 27-29 |
| X          | US 5 778 873 A (BRAITHWAITE PHILIP W)<br>14 July 1998 (1998-07-14)<br>column 18, line 19 - line 64; figure 16   | 1-4, 6, 8,<br>9, 29   |
| X          | WO 01/30430 A (INNOVATA BIOMED LTD<br>;BRAITHWAITE PHILIP (GB); WILLIAMS STEVEN<br>GRAH) 3 May 2001 (2001-05-03)<br>page 7, line 15-24<br>page 10, line 1-7; figures 1, 12A | 1-4, 6, 8,<br>9, 29   |
| X          | US 4 095 587 A (ISHIKAWA MUTSUO)<br>20 June 1978 (1978-06-20)<br>the whole document   | 1-6, 18,<br>21        |
|            | -/--  |                       |

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

14 July 2004

Date of mailing of the international search report

20/07/2004

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| C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT |  |                       |
|--|--|-----------------------|
| Category *   | Citation of document, with indication, where appropriate, of the relevant passages                                     | Relevant to claim No. |
| X  | GB 959 383 A (ESCHER WYSS AG)<br>3 June 1964 (1964-06-03)<br>page 2, line 47 - line 98; figures 2,4<br>-----           | 1, 3, 5, 6,<br>8      |
| X  | US 4 815 625 A (FILHOL STUART J ET AL)<br>28 March 1989 (1989-03-28)<br>the whole document<br>-----                    | 1-4, 6-8              |
| A  | US 1 410 556 A (DORMENT FRANK C)<br>28 March 1922 (1922-03-28)<br>the whole document<br>-----                          | 8-17,<br>24-26        |
| E  | WO 2004/045688 A (RAND PAUL KENNETH ; GLAXO<br>GROUP LTD (GB)) 3 June 2004 (2004-06-03)<br>the whole document<br>----- | 8-17,<br>24-26        |

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## Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:  
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☒ Claims Nos.: 30  
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:  
see FURTHER INFORMATION sheet PCT/ISA/210
3. ☐ Claims Nos.:  
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this International application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

### Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.  
☐ No protest accompanied the payment of additional search fees.

**FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210**

Continuation of Box II.2

Claims Nos.: 30

It is unclear what technical features of the device are defined by referring to the figures (Article 84 EPC and Guidelines C-III, 4.10)

The applicant's attention is drawn to the fact that claims, or parts of claims, relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/004007

| Patent document<br>cited in search report |   | Publication<br>date | Patent family<br>member(s)   | Publication<br>date  |
|---|---|---------------------|--|--|
| US 5562918                                | A | 08-10-1996          | GB 2270293 A<br>DE 69318027 D1<br>DE 69318027 T2<br>EP 0659094 A1<br>WO 9405358 A2<br>JP 8500750 T   | 09-03-1994<br>20-05-1998<br>13-08-1998<br>28-06-1995<br>17-03-1994<br>30-01-1996   |
| US 5778873                                | A | 14-07-1998          | AT 191649 T<br>AU 3508793 A<br>BR 9305942 A<br>CA 2130477 A1<br>CN 1082191 A , B<br>CN 1234280 A<br>DE 69328358 D1<br>DE 69328358 T2<br>DK 626869 T3<br>EP 0626869 A1<br>EP 0928618 A1<br>ES 2145770 T3<br>FI 943813 A<br>FI 20020690 A<br>WO 9316748 A2<br>GB 2278596 A , B<br>GB 2292557 A , B<br>GR 3033790 T3<br>IN 181091 A1<br>IN 182859 A1<br>JP 7506981 T<br>KR 264805 B1<br>MX 9300908 A1<br>NO 943065 A<br>NZ 249192 A<br>NZ 299262 A<br>PT 626869 T<br>US 5924417 A<br>ZA 9301171 A | 15-04-2000<br>13-09-1993<br>21-10-1997<br>02-09-1993<br>16-02-1994<br>10-11-1999<br>18-05-2000<br>07-12-2000<br>11-09-2000<br>07-12-1994<br>14-07-1999<br>16-07-2000<br>19-08-1994<br>10-04-2002<br>02-09-1993<br>07-12-1994<br>28-02-1996<br>31-10-2000<br>18-04-1998<br>31-07-1999<br>03-08-1995<br>01-09-2000<br>01-11-1993<br>12-10-1994<br>29-01-1997<br>29-01-1997<br>31-10-2000<br>20-07-1999<br>14-02-1994 |
| WO 0130430                                | A | 03-05-2001          | AU 1037101 A<br>BR 0014933 A<br>CA 2386912 A1<br>EP 1237604 A1<br>WO 0130430 A1<br>JP 2003512138 T<br>NO 20021858 A<br>PL 354621 A1<br>ZA 200202777 A  | 08-05-2001<br>18-06-2002<br>03-05-2001<br>11-09-2002<br>03-05-2001<br>02-04-2003<br>05-06-2002<br>09-02-2004<br>09-07-2003   |
| US 4095587                                | A | 20-06-1978          | JP 52088291 U<br>AU 501333 B2<br>AU 2081376 A<br>CA 1070770 A1<br>CH 641051 A5<br>DE 2629432 A1<br>FR 2336146 A1<br>GB 1503109 A<br>SE 418150 B  | 01-07-1977<br>14-06-1979<br>29-06-1978<br>29-01-1980<br>15-02-1984<br>30-06-1977<br>22-07-1977<br>08-03-1978<br>11-05-1981   |
| GB 959383                                 | A | 03-06-1964          | CH 371528 A  | 31-08-1963   |

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No.

PCT/EP2004/004007

| Patent document<br>cited in search report |   | Publication<br>date | Patent family<br>member(s)     | Publication<br>date      |
|---|---|---------------------|--------------------------------|--------------------------|
| GB 959383                                 | A |                     | DE 1174916 B<br>FR 1270728 A   | 30-07-1964<br>01-09-1961 |
| US 4815625                                | A | 28-03-1989          | EP 0207709 A2<br>JP 62064733 A | 07-01-1987<br>23-03-1987 |
| US 1410556                                | A | 28-03-1922          | NONE                           |                          |
| WO 2004045688                             | A | 03-06-2004          | WO 2004045688 A1               | 03-06-2004               |